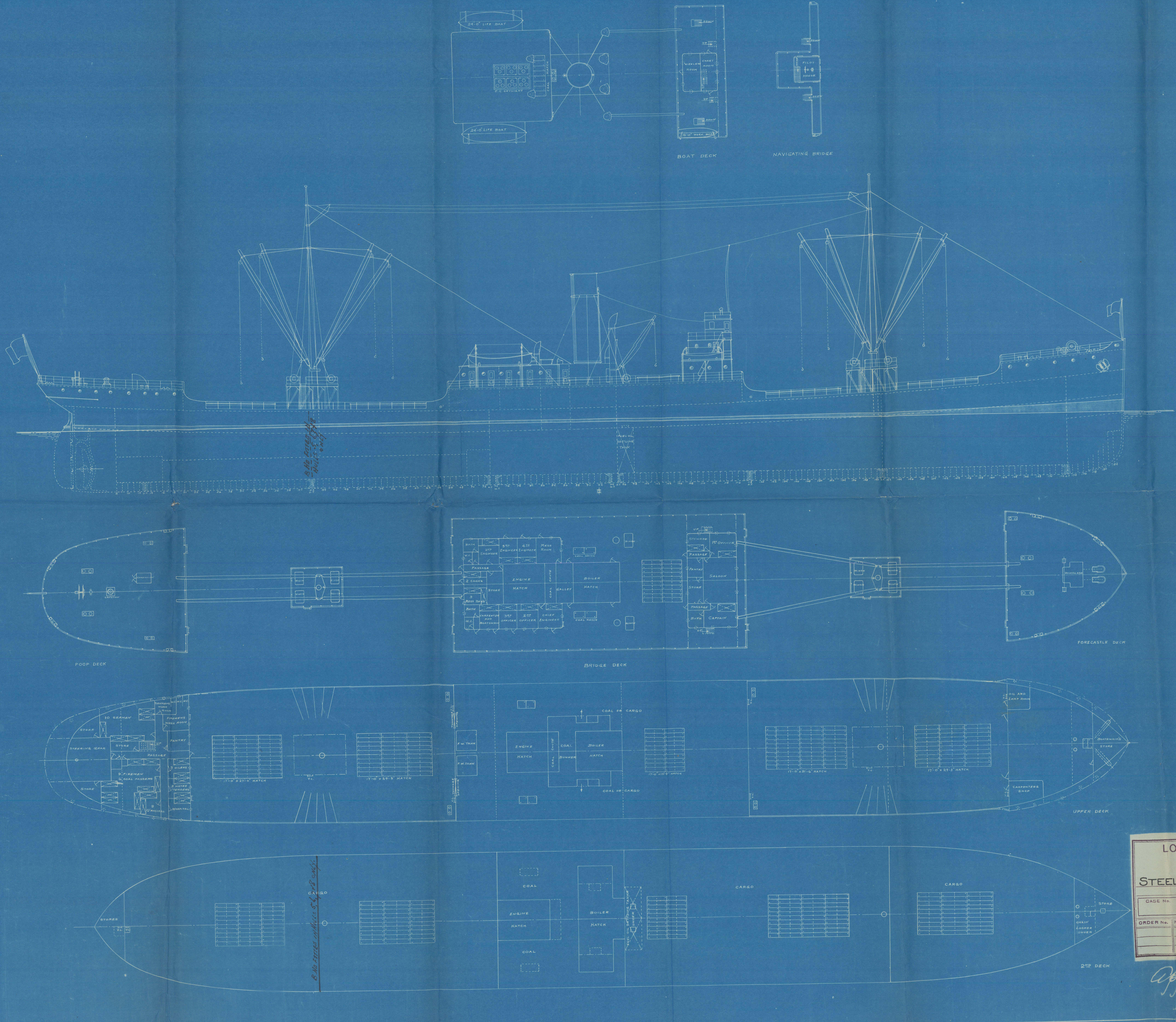

— GENERAL PARTICULARS —

LENGTH OVERALL	423'-9"
LENGTH BETWEEN PERPS.	410'-0"
BEAM MOULDED	54'-0"
DEPTH MOULDED	29'-9"
DRAFT LOADED	24'-2"
DEADWEIGHT	ABOUT 8800 TONS
SPEED	10½ KNOTS
CUBIC CAPACITY (GRAIN)	490000 CUBIC FT.
CUBIC CAPACITY (BALES)	435000 " "
FUEL OIL	1090 TONS
COAL BUNKER (PERMANENT)	420 "
COAL BUNKER (RESERVE)	900 "
GROSS TONNAGE (AMERICAN) ABOUT	5730 TONS
NET TONNAGE " "	3880 TONS.

LOS ANGELES SHIP BUILDING
AND DRY DOCK CO.
LOS ANGELES, CALIF.

STEEL CARGO STEAMER 8800 TONS D.W.
GENERAL ARRANGEMENT

CASE No.	DATE	SCALE 1/16" = 1 ft.	SHEET No.

ORDER No.	No. WANTED	DESIGNED FOR	REMARKS

Approved
Theo. E. Ferris
May 17/17

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Lloyd's Register
Foundation

POOP DECK
ESCAPE TRUNK STB'D OF ℄
ELEVATION of POOP BULKHEAD
LOOKING AFT
POOP DECK
UPPER DECK
44" COAMING PLATE 15" WIDE
STIFFENERS:- 6" x 3½" x 11.7# Ls
¾ RIVETS @ 5¼" C-C
LUGS AT TOP + BOTTOM
MARKING:-
PLATES: STOCK
STIFFENERS: FROM SPARES
ANGLES: STOCK
COAMING PLATE: STOCK .44" PLATE
BRIDGE DECK
TONNAGE OPENING CLOSED WITH WATER TIGHT DOOR (SEE DETAIL)
STIFFENERS:- 5 x 3" x 9.8# Ls
MARKING:-
PLATES: TB#66-5 OTHERS FROM SPARES
STIFFENERS: TBS#66
ANGLES: STOCK
COAMING: STOCK
ELEVATION of BULKHEAD #66 at AFTER END of BRIDGE
LOOKING FORWARD
PLAN of BRIDGE DECK
ENGINE HATCH
BOILER HATCH
HATCH No 3
ELEVATION of FORWARD END of BOILER HATCH AND BULKHEAD of COAL BUNKER & CHUTES
LOOKING AFT
COAL CHUTE
MARKINGS:-
PLATES: FCA #21-22-23 & SPARES
STIFFS: FCS #1
ANGLES: STOCK
STARBOARD ELEVATION of ENGINE HATCH CASING and COAL CHUTE
STARBOARD ELEV. of BOILER HATCH CASING
ON UPPER DECK
MARKINGS:- PLATES-ECG#1 - ECE#1 - ECB#1,2,3.
STIFFENERS- EGS#1 & #3
ANGLES- STOCK
FORWARD BRIDGE BULKHEAD
LOOKING AFT
MARKINGS:-
PLATES:- STOCK .40" THICK
STIFFENERS: STOCK
ANGLES: STOCK
COAMING PLATE: STOCK .44" THICK
STARBOARD ELEVATION OF COAL BUNKER ON UPPER DECK
MARKINGS:-
PLATES: FCC#1-2-3-4 + 1 SPARE
STIFFENERS:- FCS #1
ANGLES:- STOCK
FORECASTLE DECK
UPPER DECK
ELEVATION of FORECASTLE BULKHEAD
LOOKING FORWARD
MARKINGS:-
PLATES:- T.B.162 #1-2-3-4
STIFFENERS: T.B.S. 162
ANGLES:- STOCK & SCRAP
COAMING PLATES: SPARES
MARKINGS:-
PLATES: ECD#1 or #4
STIFFS: ECS#1
ANGLES: STOCK
ELEVATION of AFT END of BOILER HATCH - ALSO of AFT END of ENGINE HATCH ALSO of FORWARD END of BOILER HATCH
OUTSIDE ELEVATIONS of BULKHEADS AT CARPENTER'S ROOM
EXPANSION of CORNER PLATE
OUTSIDE ELEVATION of BULKHEADS OIL and LAMP ROOM
SHELL DOUBLING AT SHEER STRAKE
PLATE TO BE DOUBLED AT BREAK OF BRIDGE as shewn
FORECASTLE DECK
30" x 42" HATCH
PLAN of UPPER DECK
HATCH No 5
HATCH No 4
ENGINE HATCH
BOILER HATCH
HATCH No 3
HATCH No 2
HATCH No 1
A
B
C
D
E
F

TABLE of RIVETS for DECK PLATING

BUTT LAPS for UPPER DECK.

2½" - FOR PLATES U-D-A. 1,2,3 & 12,13,14 SINGLE RIVETTED. ⅝" RIVETS AT 2½" C-C
3" - do do U-D-A. 4 & 5 - do do ¾" do - 3" C-C
5" - do do U-D-A 6,7,8,9,10,11 DOUBLE RIVETTED ¾" do - 3" C-C
2½" - do do U-D-B. 1,2, & 13,14,15 SINGLE do ⅝" do - 2½" C-C
3" - do do U-D-B. 3 & 4 do do ¾" do - 3" C-C
5" - do do U-D-B. 5,6, - 9,10,11,12 DOUBLE do ¾" do - 3" C-C
3" - do do U-D-C. 1,2,3, & 16,17,18,19 SINGLE RIVETTED ¾" do - 3" C-C
5" - do do U-D-C 4,7,8,9,10,11,12 & 15 DOUBLE RIVETTED ¾" do - 3" C-C
9" - do do U-D-C 5,6 & 13,14 TREBLE do ⅞" do - 3½" C-C
3" - do do U-D-D. 1,2,3 & 15 TO 19 INCL. SINGLE do ¾" do - 3" C-C
5" - do do U-D-D 4 TO 14 INCL. DOUBLE do ¾" do - 3" C-C
2½" - do do U-D-E. 1 & 14,15,16 SINGLE do ⅝" do - 2½" C-C
5" - do do U-D-E. 2 TO 13 INCL. DOUBLE do ¾" do - 3" C-C
7½" - do do U-D-F. 1 TO 5 & 17 TO 22 INCL. TREBLE do ¾" do - 3⅜" C-C
7½" - do do U-D-F. 9 TO 13 INCLUSIVE do do ¾" do - 3⅜" C-C
12" - do do U-D-F. 6,7,8, & 14,15,16. QUADRUPLE do ⅞" do - 3½" C-C

EDGE LAPS for UPPER DECK.

2¼" FOR PLATES U-D-A. .34 TO .34" SINGLE RIVETTED ⅝" RIVETS AT 2¾" C-C
2½" do do U-D-A. .34" TO .40"; .44 .48; .40 TO .44 .48; .48 TO .48 do do ¾" do - 3⅜" C-C
2¼" do do U-D-B. .34 TO .34 do do ⅝" do - 2¾" C-C
2½" do do U-D-B. .34 TO .38; .48 (.40 TO .44 .34 TO .44) (.44 TO .48) do do ¾" do - 3¾" C-C
3" do do U-D-B. .48" TO .52" do do ⅞" do - 4" C-C
2½" do do U-D-C. .34" TO .34; .38, .48; .40 TO .44 .48" do do ¾" do - 3⅜" C-C
3" do do U-D-C. .48" TO .52"; .40 TO .52; .34 TO .52 do do ⅞" do - 4" C-C
2¼" do do U-D-D. .34" TO .34" do do ⅝" do - 2¾" C-C
2½" do do U-D-D. .34" TO .48"; .40 TO .40 .48; .48 TO .48" do do ¾" do - 3⅜" C-C
2½" do do U-D-E. .34" TO .44"; .48" TO .40", .44" do do do do - do
3" do do U-D-E. .40" TO .66"; .48" TO .66" DOUBLE do ⅞" do - 4" C-C
2½" do do U-D-F. (SEE ABOVE) SINGLE do ¾" do - 3⅜" C-C
3" do do U-D-F. do do ⅞" do - 4" C-C

ALL DOUBLING PLATES U-D-G. 1 TO 8 INCLUSIVE .40" THICK. ¾" do - 3⅜ C-C

PLATING RIVETTED to UPPER DECK BEAMS

FOR PLATES U-D-A 1 TO 4 & 11 TO 14 INCLUSIVE ⅝" RIVETS AT 4½" C-C
do do U-D-A 5 TO 10 do ¾" do - 5¼" C-C
do do U-D-B 1 TO 3 & 12 TO 15 do ⅝" do - 4½" C-C
do do U-D-B 4 TO 11 do ¾" do - 5¼" C-C
do do U-D-C 1 & 18,19 do ⅝" do - 4½" C-C
do do U-D-C 2,3,4, - 7 TO 12 & 15 TO 17 do ¾" do - 5¼" C-C
do do U-D-C 5,6 & 13,14 do ⅞" do - 6¼" C-C
do do U-D-D 1 TO 4 & 15 TO 19 do ⅝" do - 4½" C-C
do do U-D-D 5 TO 14 do ¾" do - 5¼" C-C
do do U-D-E 1-2 & 14,15,16 do ⅝" do - 4½" C-C
do do U-D-E 3 TO 13 do ¾" do - 5¼" C-C
do do U-D-F 1 TO 6 - 9 TO 13 & 17 TO 22 do ¾" do - 5¼" C-C
do do U-D-F 7 & 8 & 14,15,16 do ⅞" do - 6¼" C-C

BUTT LAPS for FORECASTLE & POOP DECKS

2½" FOR A,B & C STRAKES - SINGLE RIVETTED - ¾" RIVETS AT 3" C-C
4¼" do E STRAKE DOUBLE do ¾" do - 3" C-C

EDGE LAPS for FORECASTLE & POOP DECKS

2½" FOR ALL PLATES ¾" RIVETS AT 3⅜" C-C

PLATING RIVETTED TO FORECASTLE & POOP DECK BEAMS

FOR ALL PLATES ¾" RIVETS AT 5¼" C-C
ALL DOUBLING PLATES .36" THICK ¾ do AT 3" C-C

BUTT LAPS for BRIDGE DECK

5" - FOR A,B,C,D,E STRAKES DOUBLE RIVETTED - ¾" RIVETS AT 3" C-C
9" - do "F" STRINGER PLATES TREBLE do ⅞" do - 3½" C-C

EDGE LAPS for BRIDGE DECK

2½" FOR A,B,C,D STRAKES SINGLE RIVETTED ¾" RIVETS AT 3⅜" C-C
5¼" FOR E & F do double do ⅞" do - 3½" C-C

PLATING RIVETTED TO BRIDGE DECK BEAMS

FOR ALL A,B,C,D & E PLATES ¾" RIVETS AT 5¼" C-C
FOR F PLATES ⅞ do - 6½" C-C
ALL DOUBLING PLATES .40 THICK ¾" RIVETS AT 3⅜ C-C

APPROVED
LLOYD'S REGISTER OF SHIPPING
JAN 14 1918
NEW YORK

J. French

Surveyor

LOS ANGELES SHIP BUILDING
AND DRY DOCK CO.
LOS ANGELES, CALIF.

UPPER DECK, POOP, BRIDGE, AND FORECASTLE.
ENGINE & BOILER CASINGS, DECK ERECTIONS.

CASE No. 13 DATE: SEPT. 1ST SCALE: ¼" = 1 FOOT SHEET No. 95

ORDER No.	No. WANTED	DESIGNED FOR	REMARKS

41620-0216

PLAN of SECOND DECK
HATCH #5
HATCH #4
ENGINE HATCH
BOILER HATCH
HATCH #3
HATCH #2
HATCH #1
5"x5"x18.1# L SHELL CLIPS FROM FRAME #81 TO #99
THESE PLATES TO BE TAKEN FROM SPARES
6" DOUBLE RIVETED EDGE LAP
1" RIVETS @ 4½" C-C
10½" BUTT LAP
1" RIVETS @ 4" C-C
ELEVATION of SHAFT TUNNEL
NOTE:- NUMBERS IN ○ ARE FOR STARBOARD PLATES.
NUMBERS IN □ ARE FOR PORT PLATES.
DETAIL of MAIN MAST STEP
SCALE:- ½" = 1 FOOT.
MAIN MAST TO CENTER ON FRAME LINE #43
PLAN of WATER TIGHT FLAT AFT and TOP of SHAFT TUNNEL
5"x5"x18.1# BOUNDARY ANGLE
HALF ELEVATION of BOILER HATCH AT FRAME #84 LOOKING FORWARD.
HALF ELEVATION of BOILER HATCH AT FRAME #93 LOOKING AFT.
ELEVATION of OUTSIDE of ENGINE HATCH
EXPANDED SLOPING SIDE of BOILER HATCH
PLAN of STIFFENERS, ETC. FOR ENGINE & BOILER HATCH AT SECOND DECK
DETAIL of BOILER HATCH AT UPPER DECK
SCALE:- 1" = 1 FOOT.
DETAIL of BOILER HATCH AT SECOND DECK
SCALE:- 1" = 1 FOOT
PLAN of BEAMS at 2ND DECK HATCHES
DETAIL of BEAMS AT HATCHES
DETAILS of HATCH LADDERS
PLAN of WATERTIGHT FLAT FOR'D and LOWER STRINGER.
SEE PANTING ARRANG. FOR'D (CASE 16 SHEET 257) FOR STGR. CONNECTIONS
CENTER LINE of SHIP
See approved plan of panting arrangement
JAN 14 1918
18"x30" W.T. MANHOLE INTO DEEP TANK (SEE DETAIL)
LADDER SECURED TO BEAM.
9"x3.8"x3.8"x28.6# [s WITH 1½"x½"
FLATS SPACED ABOUT 12" C-C - RIVETTED TO FLANGES of CHANNELS WITH ⅞" RIVETS.
BUTT LAP 5" WIDE
¾" RIVETS - 3" C-C.
BEAMS OF W.T. FLAT FOR'D.
7"x3.438"x3.438"x18.6#

LOS ANGELES SHIP BUILDING
AND DRY DOCK CO.
LOS ANGELES, CALIF.

PLAN of SECOND DECK & WATERTIGHT FLATS
DETAILS of SHAFT TUNNEL & BOILER HATCH.

CASE No. 13
DATE AUG. 3. 1917
SCALE:- ¼" = 1 FOOT.
SHEET No. 84

ORDER No.	No. WANTED	DESIGNED FOR	REMARKS
		HULLS 1 TO 8	

S.S. "West Galoc"

Midship Section
of vessel as built

— Hull No 5 —

Los Angeles S.B. & D.Dk Co
San Pedro: Cal.
(Port of Los Angeles)

S. Fo. 4814.

LLOYDS REGISTER OF SHIPPING
RECEIVED
14 OCT 1918
LONDON

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Lloyd's Register
Foundation

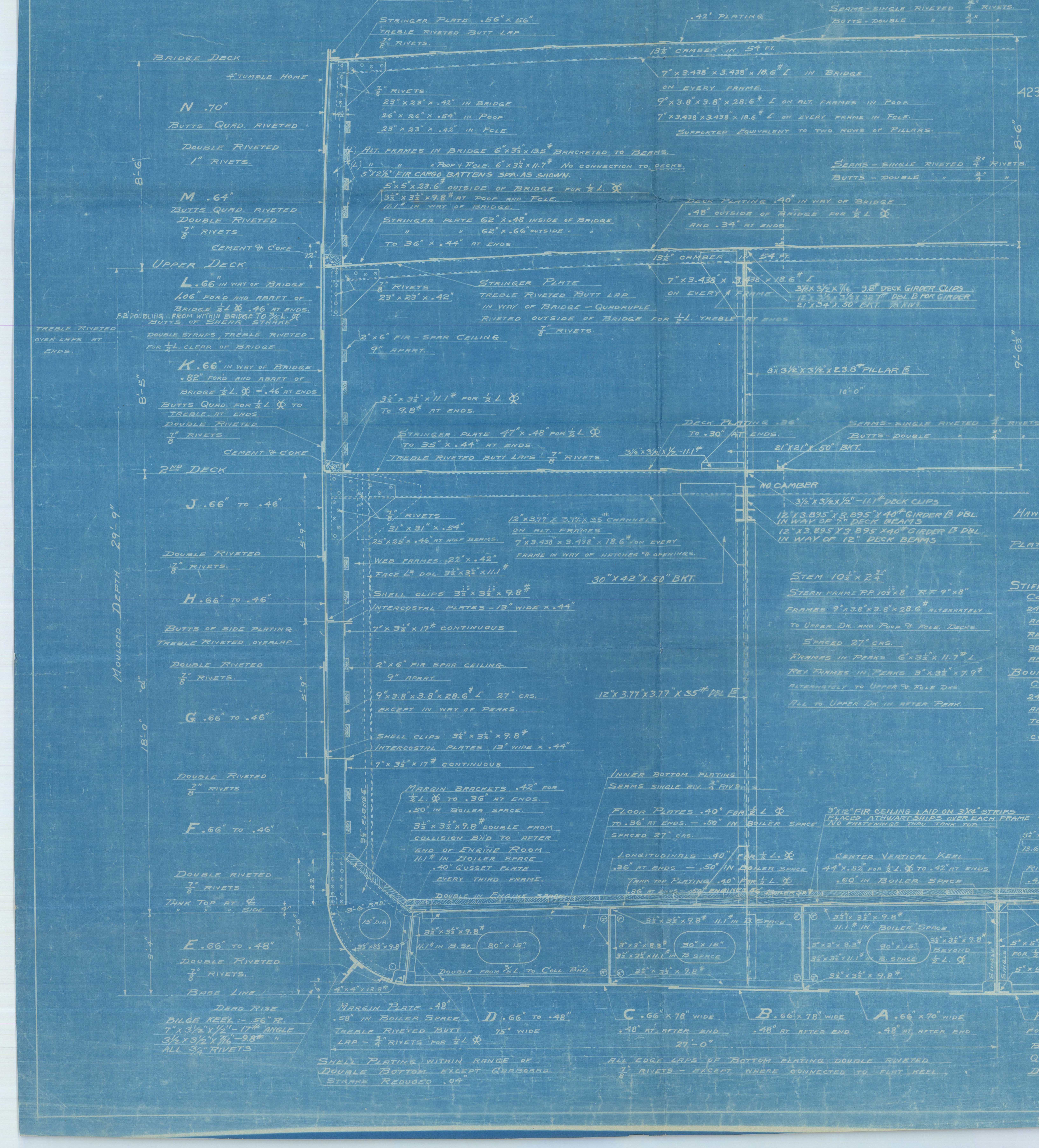
Approved
Thos. E. Perris
May 12/17

MIDSHIP SECTION
S.S. WEST GALOC

SCALE 1/2" = 1 FT.

CASE 14 SHEET 66

MIDSHIP SECTION
STEEL FREIGHT STEAMER
423'-9" OVER ALL 410'-5½" - 54' BEAM 29'-9" DEPTH.



5" × 5" × 20#
STRINGER PLATE .56" × 56"
TREBLE RIVETED BUTT LAP
7/8" RIVETS.
.42" PLATING
SEAMS - SINGLE RIVETED 3/4" RIVETS.
BUTTS - DOUBLE " 3/4" "
13½" CAMBER IN 54 FT.
7" × 3.438" × 3.438" × 18.6# ⊏ IN BRIDGE
ON EVERY FRAME.
9" × 3.8" × 3.8" × 28.6# ⊏ ON ALT. FRAMES IN POOP.
7" × 3.438" × 3.438" × 18.6# ⊏ ON EVERY FRAME IN FCLE.
SUPPORTED EQUIVALENT TO TWO ROWS OF PILLARS.
BRIDGE DECK
4" TUMBLE HOME
7/8" RIVETS
23" × 23" × .42" IN BRIDGE
26" × 26" × .54" IN POOP
23" × 23" × .42" IN FCLE.
N .70"
BUTTS QUAD. RIVETED
DOUBLE RIVETED
1" RIVETS.
8'-6"
4½"
(L) ALT. FRAMES IN BRIDGE 6" × 3½" × 13.5# BRACKETED TO BEAMS.
(L) " " " POOP & FCLE. 6" × 3½" × 11.7# NO CONNECTION TO DECKS.
5" × 2½" FIR CARGO BATTENS SPA. AS SHOWN.
5" × 5" × 23.6# OUTSIDE OF BRIDGE FOR ½ L. Ø
3½" × 3½" × 9.8# AT POOP AND FCLE.
11.1# IN WAY OF BRIDGE.
STRINGER PLATE 62" × .48" INSIDE OF BRIDGE
" " 62" × .66" OUTSIDE " "
TO 36" × .44" AT ENDS.
SEAMS - SINGLE RIVETED 3/4" RIVETS.
BUTTS - DOUBLE " 3/4" "
8'-6"
M .64"
BUTTS QUAD. RIVETED
DOUBLE RIVETED
7/8" RIVETS
CEMENT & COKE
12"
DECK PLATING .40" IN WAY OF BRIDGE
.48" OUTSIDE OF BRIDGE FOR ½ L Ø
AND .34" AT ENDS.
UPPER DECK
13½" CAMBER IN 54 FT.
7" × 3.438" × 3.438" × 18.6# ⊏
ON EVERY FRAME
3½ × 3½ × 7/16 - 9.8# DECK GIRDER CLIPS
12 × 3½ × 3½ × 32.7# DBL. ⊏S FOR GIRDER
21" × 34" × .50" BKT. 7/8 RIVS.
L .66" IN WAY OF BRIDGE
1.06" FOR'D AND ABAFT OF
BRIDGE ½ L Ø .46" AT ENDS.
.82" DOUBLING FROM WITHIN BRIDGE TO 3/5 L. Ø
BUTTS OF SHEAR STRAKE
DOUBLE STRAPS, TREBLE RIVETED
FOR ½ L. CLEAR OF BRIDGE.
TREBLE RIVETED
OVER LAPS AT
ENDS.
7/8" RIVETS
23" × 23" × .42"
STRINGER PLATE
TREBLE RIVETED BUTT LAP
IN WAY OF BRIDGE - QUADRUPLE
RIVETED OUTSIDE OF BRIDGE FOR ½ L. TREBLE AT ENDS
7/8" RIVETS.
2" × 6" FIR - SPAR CEILING
9" APART.
K .66" IN WAY OF BRIDGE
.82" FOR'D AND ABAFT OF
BRIDGE ½ L. Ø - .46" AT ENDS
BUTTS QUAD. FOR ½ L Ø TO
TREBLE AT ENDS.
DOUBLE RIVETED
7/8" RIVETS
8'-5"
9'-6½"
8" × 3½" × 3½" × 23.8# PILLAR ⊏S
10'-0"
3½" × 3½" × 11.1# FOR ½ L Ø
TO 9.8# AT ENDS.
STRINGER PLATE 47" × .48" FOR ½ L Ø
TO 35" × .44" AT ENDS.
TREBLE RIVETED BUTT LAPS - 7/8" RIVETS
3½" × 3½" × ½ - 11.1#
DECK PLATING .36"
TO .30" AT ENDS.
SEAMS - SINGLE RIVETED 3/4" RIVETS
BUTTS - DOUBLE " 3/4" "
21" × 21" × .50" BKT.
CEMENT & COKE
2ND DECK
NO CAMBER
3½" × 3½ × ½" - 11.1# DECK CLIPS
12" × 3.895" × 3.895" × 40# GIRDER ⊏S DBL.
IN WAY OF 7" DECK BEAMS
12" × 3.895 × 3.895 × 40# GIRDER ⊏S DBL.
IN WAY OF 12" DECK BEAMS
J .66" TO .46"
7/8" RIVETS
31" × 31" × .54"
25" × 25" × .46" AT HALF BEAMS.
12" × 3.77" × 3.77" × 35# CHANNELS
ON ALT. FRAMES
7" × 3.438" × 3.438" × 18.6# ON EVERY
FRAME IN WAY OF HATCHES & OPENINGS.
5'-9"
DOUBLE RIVETED
7/8" RIVETS.
WEB FRAMES 22" × .42"
FACE ⊏S DBL. 3½" × 3½" × 11.1#
30" × 42" × .50" BKT.
MOULDED DEPTH 29'-9"
"d"
H .66" TO .46"
SHELL CLIPS 3½" × 3½" × 9.8#
INTERCOSTAL PLATES - 13" WIDE × .44"
7" × 3½" × 17# CONTINUOUS
BUTTS OF SIDE PLATING
TREBLE RIVETED OVERLAP
DOUBLE RIVETED
7/8" RIVETS.
2" × 6" FIR SPAR CEILING
9" APART.
9" × 3.8" × 3.8" × 28.6# ⊏ 27" CRS.
EXCEPT IN WAY OF PEAKS.
12" × 3.77" × 3.77" × 35# DBL ⊏S
5'-9"
18'-0"
G .66" TO .46"
SHELL CLIPS 3½" × 3½" × 9.8#
INTERCOSTAL PLATES 13" WIDE × .44"
7" × 3½" × 17# CONTINUOUS
DOUBLE RIVETED
7/8" RIVETS
3½" FLANGE
INNER BOTTOM PLATING
SEAMS SINGLE RIV. 3/4" RIVS.
MARGIN BRACKETS .42" FOR
½ L. Ø TO .36" AT ENDS.
.50" IN BOILER SPACE.
3½" × 3½" × 9.8# DOUBLE FROM
COLLISION B'HD TO AFTER
END OF ENGINE ROOM
11.1# IN BOILER SPACE
.40" GUSSET PLATE
EVERY THIRD FRAME.
F .66" TO .46"
FLOOR PLATES .40" FOR ½ L Ø
TO .36" AT ENDS. - .50" IN BOILER SPACE
SPACED 27" CRS.
3" × 12" FIR CEILING LAID ON 3 × 4" STRIPS
PLACED ATHWARTSHIPS OVER EACH FRAME
NO FASTENINGS THRU TANK TOP
LONGITUDINALS .40" FOR ½ L. Ø
.36" AT ENDS - .50" IN BOILER SPACE
CENTER VERTICAL KEEL
44" × .52" FOR ½ L. Ø TO .42" AT ENDS
.60" IN BOILER SPACE
3½" × 3½" × 12.4#
13.6# IN BOILER SPACE
RIDER PLATE 44" × .52" FOR ½ L. Ø
.42" AT ENDS - .56" IN BOILER SPACE.
TANK TOP PLATING .40" FOR ½ L. Ø
.36" AT ENDS - .50" ENGINES .56" BOILER SP.
DOUBLE IN ENGINE SPACE
DOUBLE RIVETED
7/8" RIVETS
22"
TANK TOP AT ℄
" " " SIDE
4"
3'-6" RAD.
15" DIA.
5'-6"
3½" × 3½" × 9.8#
11.1# IN B. SP.
30" × 15"
3½" × 3½" × 9.8# 11.1# IN B. SPACE
3" × 3" × 8.3#
3½" × 3½" × 11.1# IN B. SPACE
30" × 15"
3½" × 3½" × 9.8#
3½" × 3½" × 9.8#
11.1# IN BOILER SPACE
3" × 3" × 8.3#
3½" × 3½" × 11.1# IN B. SPACE
30" × 15"
3½" × 3½" × 9.8#
BEYOND
½ L. Ø
3½" × 3½" × 9.8#
DOUBLE RIVETED EDGE LAP
7/8" RIVETS
RIDER PLATE AND
CENTER VERTICAL KEEL
TREBLE RIVETED BUTT LAPS
7/8" RIVETS.
5" × 5" × 18.1#
FOR ½ L Ø
5" × 5" × 18.1#
SINGLE
SINGLE
3"
E .66" TO .48"
DOUBLE RIVETED
7/8" RIVETS.
3'-4"
6"
DOUBLE FROM 3/5 L. TO COLL. B'HD.
4" × 4" × 12.8#
BASE LINE
DEAD RISE
BILGE KEEL :- .56" PL.
7" × 3½" × ½" - 17# ANGLE
3½ × 3½" × 7/16" - 9.8# "
ALL 3/4" RIVETS
MARGIN PLATE .48"
.58" IN BOILER SPACE
TREBLE RIVETED BUTT
LAP - 3/4" RIVETS FOR ½ L Ø
D .66" TO .48"
75" WIDE
C .66" × 78" WIDE
.48" AT AFTER END
B .66" × 78" WIDE
.48" AT AFTER END
A .66" × 70" WIDE
.48" AT AFTER END
27'-0"
KEEL PLATE 47" × 1.02"
FOR 3/5 L. Ø TO .72" AT ENDS.
BUTTS - OVERLAPPED
QUADRUPLE RIVETED - 1⅛" RIVETS
DOUBLE RIVETED EDGE LAP - 1" RIVETS.
SHELL PLATING WITHIN RANGE OF
DOUBLE BOTTOM EXCEPT GARBOARD
STRAKE REDUCED .04"
ALL EDGE LAPS OF BOTTOM PLATING DOUBLE RIVETED
7/8" RIVETS - EXCEPT WHERE CONNECTED TO FLAT KEEL.

LLOYD'S NUMERALS

1ST NUMERAL	54 + 29.75	= 83.75
2ND "	83.75 × 410.45	= 34375.0
DEPTH (d) =		18'-0"
PROPORTIONS	TO BRIDGE DK.	= 10.73
	TO UPPER DK.	= 13.79

EQUIPMENT NUMBER

PLATING NUMBER		34375
FORECASTLE	41 × 8 × 3/4	246
BRIDGE	110 × 8 × 3/4	660
POOP	55 × 8 × 3/4	330
DECK HOUSES	52 × 8 × ½	208
EQUIPMENT No.		35819

EQUIPMENT

2	BOWER	ANCHORS	7150 LBS. EACH
1	"	"	6160 "
1	STREAM	"	2450 "
1	KEDGE	"	1050 "

(ALL STOCKLESS ANCHORS)

270 FTHMS	2¼"	STUD CHAIN CABLE	
90 "	4¾"	STEEL WIRE	(STREAM)
120 "	5"	" "	(TOWLINE)

HAWSERS 2-8" AND 2-7" - 90 FTHMS EACH.

TRANSVERSE BULKHEADS.

PLATING.

AS PER RULE

STIFFENERS.

COLLISION BHD. HOLD 12" × 4" × 4" × 40# ⊏ SPACED 24", BKT ATTACHMENT TWEEN DECK 5" × 3" × 9.8# ANGLE SPACED 24", NO LUG ATTACHMENT.

REMAINDER OF BHDS. AS PER RULE SPACED 30", LUG ATTACHMENT. TWEEN DECK 5" × 3" × 9.8# ANGLE SPACED 30", NO LUG ATTACHMENT

BOUNDRY BARS.

CONNECTION TO TANK TOP AND SHELL BELOW 24' BELOW TOP OF BULKHEAD 5" × 5" × 18.1# SINGLE ANGLE. CONNECTION TO SHELL ABOVE 24' BELOW TOP OF BULKHEAD 3½" × 3½" × 9.8# SINGLE ANGLE CONNECTION TO DECKS 3" × 3" × 7.2# SINGLE ANGLE.

STEM 10½" × 2¾"

STERN FRAME P.P. 10½" × 8" R.F. 9" × 8"

FRAMES 9" × 3.8" × 3.8" × 28.6# ALTERNATELY TO UPPER DK. AND POOP & FCLE. DECKS.

SPACED 27" CRS.

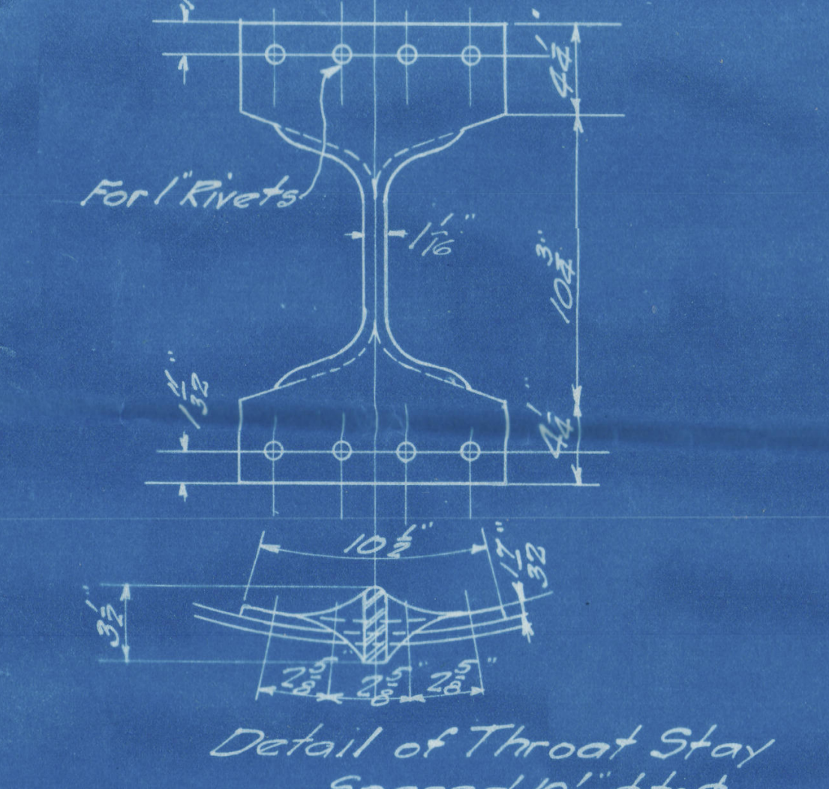
FRAMES IN PEAKS 6" × 3½" × 11.7# L.

REV. FRAMES IN PEAKS 3" × 3½" × 7.9# ALTERNATELY TO UPPER & FCLE DKS.

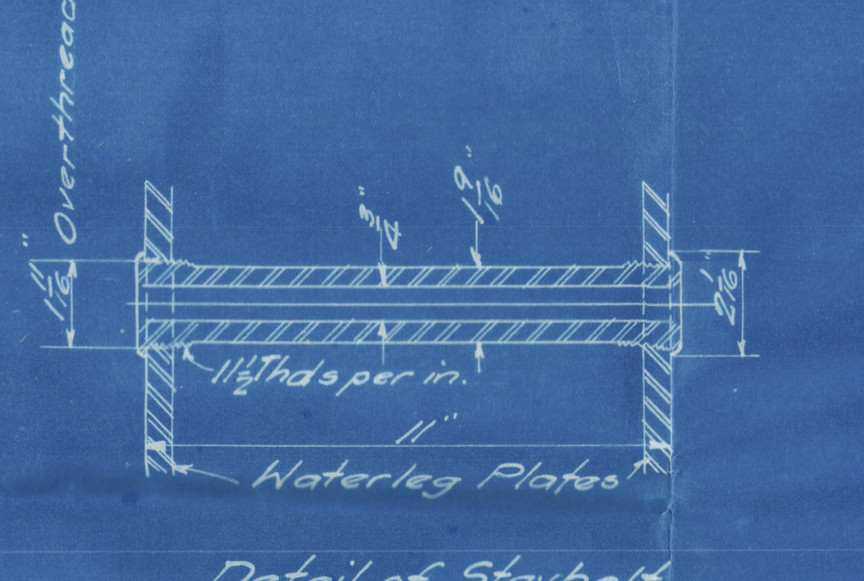
ALL TO UPPER DK. IN AFTER PEAK.

CASE 14 - SHEET 66

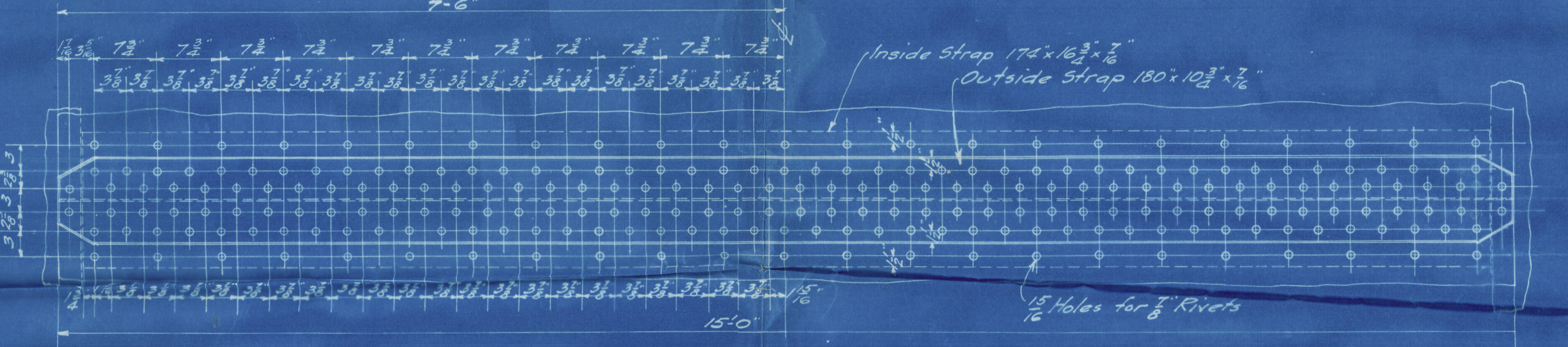
W4 17-065



Detail of Throat Stay
Spaced $10\frac{1}{2}$" ℄ to ℄.



Detail of Staybolt
Made of Hollow Seamless Tubing turned down, threaded, and riveted over.

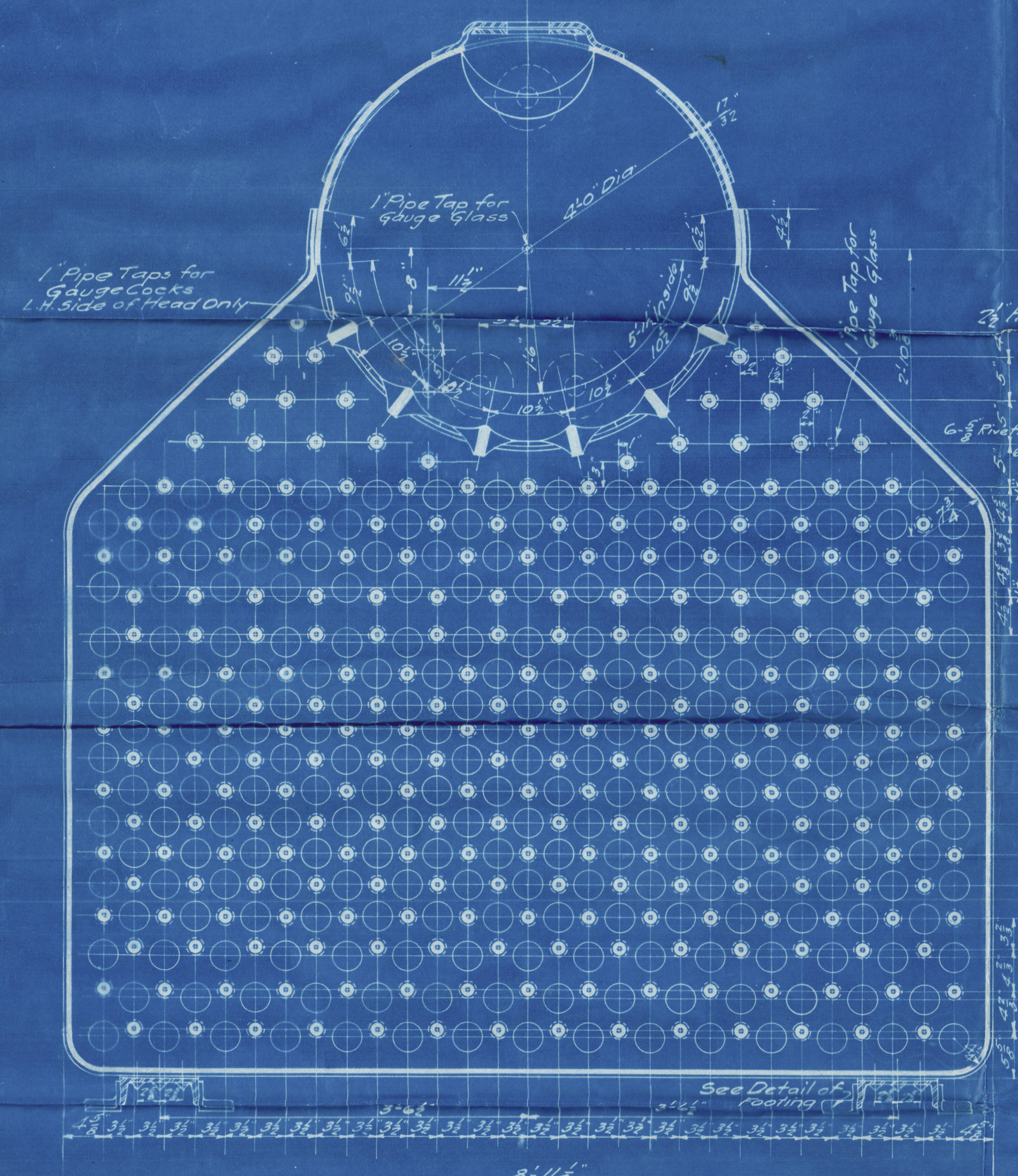

7'-6"
$7\frac{3}{4}$"
$3\frac{7}{8}$"
Inside Strap 174" x $16\frac{3}{4}$" x $\frac{7}{16}$"
Outside Strap 180" x $10\frac{3}{4}$" x $\frac{7}{16}$"
15'-0"
$\frac{15}{16}$ Holes for $\frac{7}{8}$" Rivets

Name	Size	Working Pressure lbs. per sq. in.
Shell	$\frac{17}{32}$"	$\frac{58000 \times .5313}{6 \times 24} = 214$
Tube Sheet	$\frac{17}{32}$"	$\frac{120 \times 8.5^2}{5 \times 7} = 247.7$
Stay Bolt	$1\frac{9}{16}$" Dia $\frac{3}{4}$" Hole	$\frac{1.476 \times 6000}{5 \times 7} = 253.5$
Circular Seam	$1\frac{1}{16}$" Rivet Hole	$\frac{.8866 \times 58000 \times 23}{2.6875 \times 6 \times 12 \times 28} = 218$
Long. Seam	$\frac{15}{16}$" Rivet Hole	$\frac{1 \times .6903 + (4 \times .6903 \times 1.75) \times 58000 \times 23}{7.75 \times 24 \times 6 \times 28} = 235.1$
Heads	$\frac{5}{8}$	$\frac{.6875 \times 58000}{24 \times 5} = 332$
Throat Stay	$3\frac{1}{2}$" x $1\frac{1}{16}$	$\frac{3.5 \times 1.0625 \times 7000}{10.5 \times 12} = 206.6$
" " Rivets	$1\frac{1}{16}$" Rivet Hole	$\frac{4 \times .8866 \times 58000 \times 23}{10.5 \times 12 \times 6 \times 28} = 223.5$

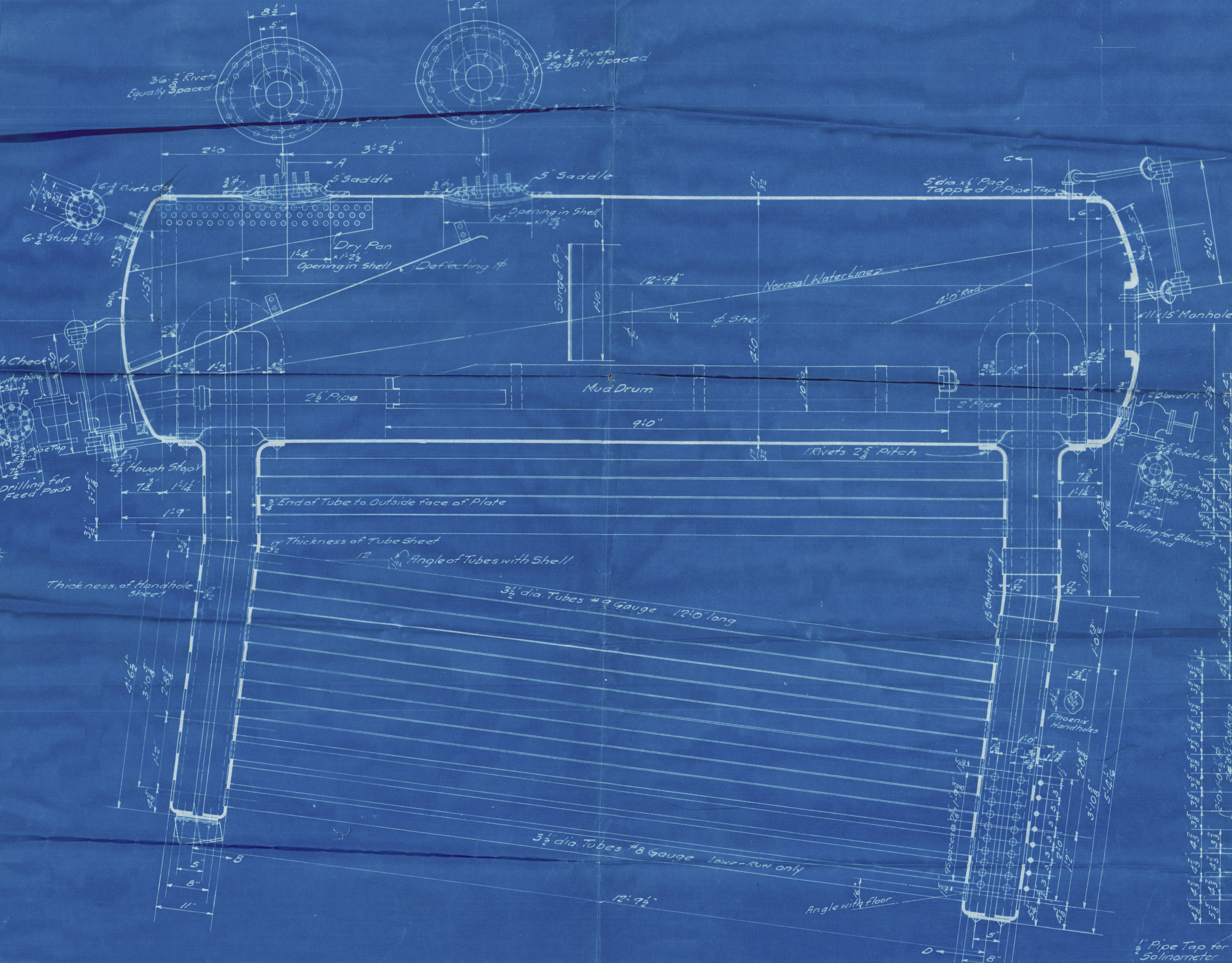
Boiler Working Pressure 200#

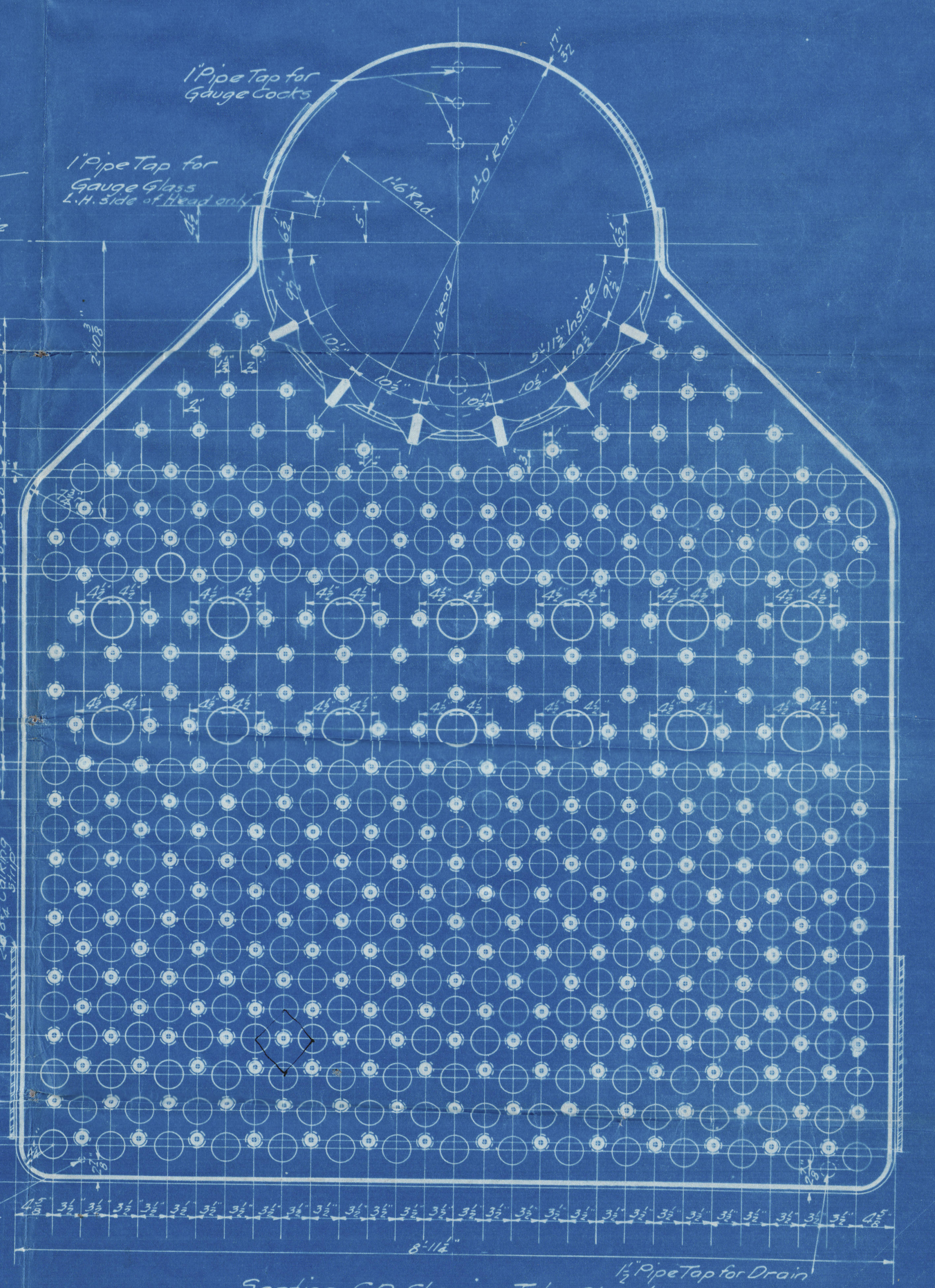
Note.- Above table based on ultimate tension of 58000 lbs. per sq. in. factor of safety 6. Shearing value $58000 \times \frac{23}{28}$

Note
Handholes punched $2\frac{5}{8}$" dia. annealed, and reamed to $3\frac{5}{8}$" dia.
Tubeholes " $2\frac{5}{8}$" " " " " to $3\frac{17}{32}$" "
Staybolt holes " $1\frac{1}{16}$" " " " " to $1\frac{9}{16}$ " and
tapped $1\frac{11}{16}$" - $11\frac{1}{2}$ threads per in.
Rivet holes punched $\frac{1}{4}$" small and reamed to size.
According to page 4, Fourth Suplement to General Rules and Regulations, Circular letter May 22, 1917, Steamboat Inspection Service.

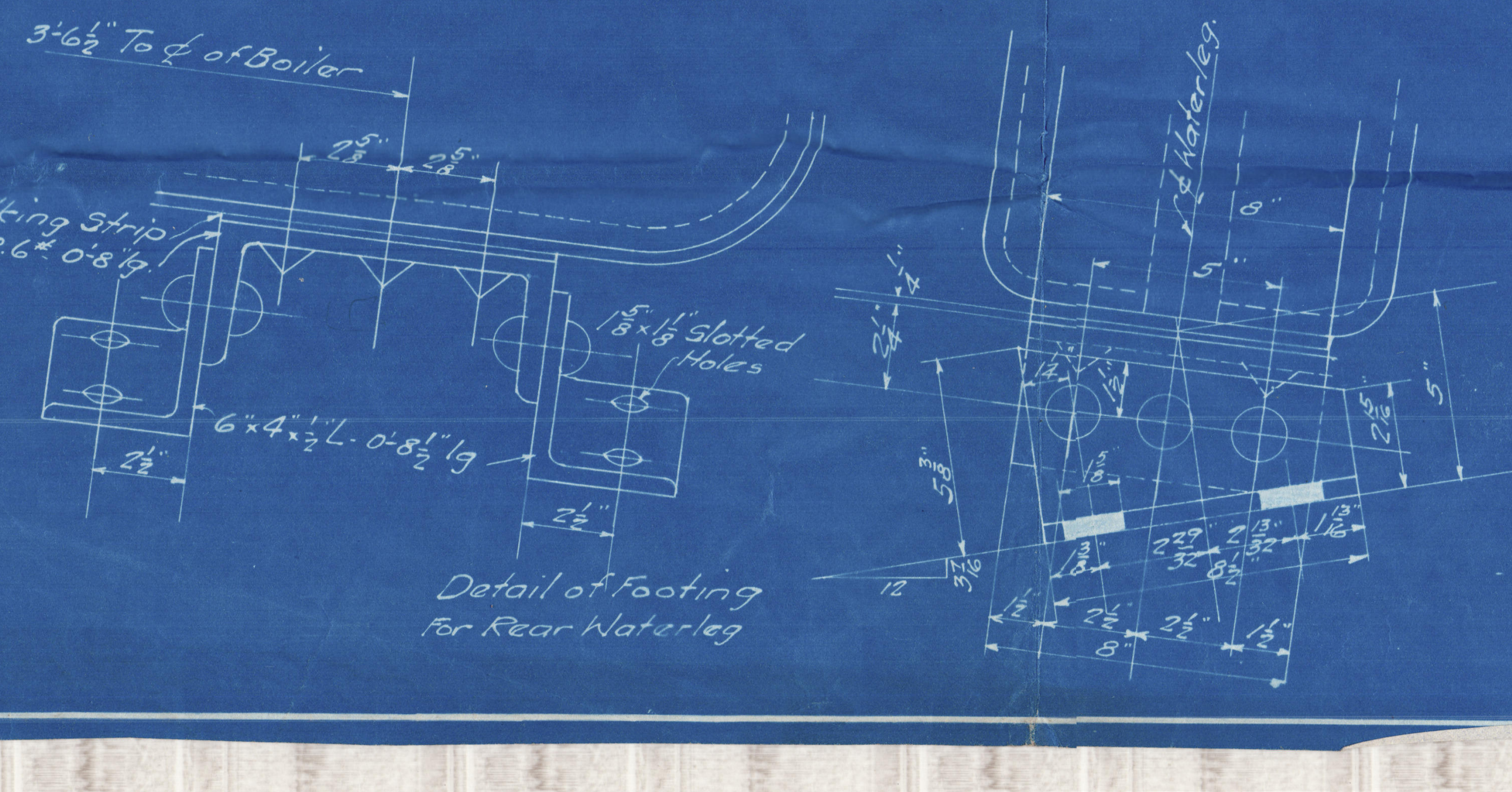

1" Pipe Tap for Gauge Glass
4'-0" Dia.
1" Pipe Taps for Gauge Cocks L.H. Side of Head Only
1" Pipe Tap for Gauge Glass
See Detail of Footing
8'-$11\frac{1}{4}$"

Section A-B. Showing Tube Sheet


36-$\frac{7}{8}$" Rivets Equally Spaced
36-$\frac{7}{8}$" Rivets Equally Spaced
$8\frac{1}{2}$"
5"
2'-0"
3'-$2\frac{1}{2}$"
A
5" Saddle
5" Saddle
6-$\frac{5}{8}$" Rivets C'sk
6-$\frac{3}{4}$" Studs-$2\frac{3}{4}$" lg
Dry Pan
Opening in Shell
Opening in Shell
Deflecting Pl.
Surge Pl.
12'-$9\frac{1}{2}$"
Normal Water Line
℄ Shell
4'-0" Rad.
5" dia. x $\frac{1}{2}$" Pad Tapped 1" Pipe Tap
C
2'-0"
11" x 15" Manhole
$2\frac{1}{2}$" Hough Check V.
Counterbore
$2\frac{1}{2}$" Pipe
Mud Drum
2" Pipe
2" Blowoff V.
9'-0"
1" Rivets $2\frac{5}{8}$" Pitch
$2\frac{1}{2}$" Hough Stop V.
Drilling for Feed Pads
4-$\frac{5}{8}$" Rivets c'sk.
Drilling for Blowoff Pad
$\frac{3}{4}$" End of Tube to Outside face of Plate
$\frac{17}{32}$" Thickness of Tube Sheet
Angle of Tubes with Shell
Thickness of Handhole Sheet
$3\frac{1}{2}$" dia. Tubes #9 Gauge 12'-0" long
15 Staytubes
Phoenix Handholes
$3\frac{1}{2}$" dia. Tubes #8 Gauge Lower Row only
12'-$9\frac{1}{2}$"
Angle with floor
B
D
$\frac{1}{2}$" Pipe Tap for Salinometer


1" Pipe Tap for Gauge Cocks
1" Pipe Tap for Gauge Glass L.H. Side of Head only
4'-0" Rad.
$1\frac{1}{2}$" Pipe Tap for Drain

Section C-D. Showing Tube Sheet


3'-$6\frac{1}{2}$" To ℄ of Boiler
$\frac{5}{8}$" x $\frac{1}{4}$" Calking Strip
Ship [28.6# 0'-8" lg.
$1\frac{5}{8}$" x $1\frac{1}{8}$" Slotted Holes
6" x 4" x $\frac{1}{2}$" L - 0'-$8\frac{1}{2}$" lg
$2\frac{1}{2}$"
℄ Waterleg
8"
5"

Detail of Footing
For Rear Waterleg

APPROVED
LLOYDS REGISTER OF SHIPPING
SEP 14 1917
NEW YORK

200# Working Pressure

HEINE SAFETY BOILER CO.

BOILER DETAILS
For HEINE MARINE BOILER
Made for Los Angeles Shipbuilding
& Dry Dock Co. Los Angeles Calif.
102-247-12

DRAWN BY N.Z.
TRACED BY N.Z.
SCALE $1\frac{1}{2}$" = 1 ft.
PHOENIXVILLE, PA. 9-13-17
REVISED DATE
111-22-P

W1505-0090